



September 14<sup>th</sup>, 2021

**Chint Power Systems Customers**

CPS 100/125kW Inverter Users

**SERVICE BULLETIN**

**CPS 100/125kW Inverter Firmware Version 10.0 Release**

This bulletin is to inform our customers that CPS is releasing a new firmware: **Version 10.0DSP/6.02LCD** to improve the performance of the 100/125KW 1500Vdc products, especially in high impedance Grid interconnections. CPS does not upgrade firmware without customer approval. Thus, CPS is requesting written approval to upgrade the firmware in the installed 100/125kW inverters. Upon receipt of your approval, CPS will upgrade the inverters (either remotely through the CPS FlexOM Portal or onsite) at no charge.

CPS has made the following modifications to the existing firmware that will provide additional benefits to the inverter and improve the performance of the Power Module:

- a. Lowered the baseline junction temperature by lowering the switching frequency.
- b. Improved the fan control algorithm to minimize thermal cycling.
- c. Improved control loop stability with slow voltage control loop and fast current control loop, to provide greater stability at grid locations with higher impedance and low SCR.
- d. Improved the protection algorithms to detect sudden changes in the Power Module temperature and latch the inverter so it does not restart when the DC is cycled. This latch requires intentional Forced Restart. Engineering analysis must precede a Forced Restart.

In addition to the firmware changes listed above, the following parameters may be modified to match site conditions and optimize the inverter performance:

- a. ControlParameterGroup = 4
- b. Startup Voltage = 900
- c. Duplication Control = 5%
- d. OperationOverVoltEn = Enabled
- e. OperationOverVolt = 125%

The changes listed above do not affect the Grid Protection, UL1741-SA and/or IEEE1547a-2014 settings of the inverter. CPS highly recommends the installation of this upgrade.

In the event of an inverter failure, please follow the safety guidelines described in the product User Manual.

This bulletin and firmware upgrade are intended to help users have a smooth and successful inverter life experience. As always, please call our **HOTLINE: 855-584-7168**, or contact your local sales or service manager for assistance.

Sincerely,

**CHINT POWER SYSTEMS AMERICA CO., LTD.**

Website: [www.chintpowersystems.com](http://www.chintpowersystems.com)